Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE - Page 1

			Wat	ershe	d Man	ageme	nt Are	ea		
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
GENERAL WATERSHED										
PLANNING, MAPPING, ASSESSMENT, AND MONITORING PROJECTS										
Regional Planning, Assessment, and Monitoring										
Implement programs to reduce pathogens, nutrients, pesticides, and sediment from agricultural fields and urban areas.	X	X	X	X	X	X	X	X	X	X
Conduct stream assessment inventories: 1) Streambank erosion. 2) Streambed aggradation and erosion. 3) Riparian community species diversity. 4) Overall bank stability and priority sites for vegetational planting or other stabilization techniques. 5) What streambed restoration projects can be planned at what portions of a stream, and can a project proposal be effectively assembled for the tasks involved?		x	X	X	X	X	x	x	X	X
Determine the prevalence of dissolved oxygen deficiency in surface waters.	X	X	X	X		X	X	X	X	
Conduct water quality modeling and monitoring to analyze/ validate the source, transport, and fate of pollutants, particularly those projects that support Surface Water Ambient Monitoring Program.	X	х	X	X	X	X	X	X	X	X
Research and develop rapid indicators of bacterial/ pathogenic contamination, acute/chronic toxicity, etc.	X	X	X	X	X	X	X	X	X	X
Evaluate the re-growth potential of bacteria indicators and pathogenic organisms in freshwater habitats.		X	X	X		X	X	X	X	X
Identify and evaluate Best Management Practices (BMPs) for the reduction of bacterial indicators and pathogenic organisms in urban settings.	X	X	X	X	X	X	X	X	X	X
Perform beneficial use surveys of inland water bodies.		X	X	X		X	X	X	X	X
Evaluate sources (including groundwater and air deposition) of organochlorine/hydrocarbon pollutants.	X	X	X	X	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 2

			Wat	ershe	d Mana	ageme	nt Are	ea		
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
Evaluate a Critical Coastal Area (CCA) as a pilot project from those selected for Region 8, to date, Upper Newport Bay, Newport Beach Marine Life Refuge, or Irvine Coast Marine Life Refuge (CCAs are adjacent to Marine Managed Areas receiving flow from CWA Sec. 303(d) impaired waters, or State Water Quality Protection Areasformerly ASBS sites)				X	X					
Vessel waste reduction projects.	X			X	X	X		X		X
Investigations of beach closures and determination of chronic coliform source locations.	X	X		X	X					
Report on the status/trends of biodiversity of kelp forests, rock reefs, and tide pools within State waters.				X	X					
Model nearshore/ tidal currents at marsh and estuary										
inlets to understand pollutant transport patterns. Conduct baseline watershed assessments for	X	X		X	X					
sediment load. Inventory locations where sediment chronically enters streams i.e. rural roads, various streambanks, construction sites, grazing impacts.	X	X	X	X	X	X	X	X	X	X
Determine surface waters with detected and elevated endocrine disrupting compounds.	X	X	X	X	X	X	X	X	X	X
Address WQ standards compliance and WQ impacts as a result of the October 2003 and May 2004 fires and subsequent debris flows.						X		X	X	Х
Support studies to update list of impaired water bodies required by CWA Section 303(d), with germane stressors/pollutants.	X	X	X	X	X	X	X	X	X	X
Inventory in the field any water bodies and wetlands that may be added or even deleted from Basin Plan list. Redefine any reaches of inland streams.	X	X	X	X	X	X	X	X	X	X
Implement Clean Beach Initiative issues, including rapid indicators, diversions, and support of beach trash pick-up days.	X	X		X	X					
2. Regional Mapping, GIS, and Database Management										
Create and support two full time Regional Board staff positions: Database Manager and GIS Analyst.	X	X	X	X	X	X	X	X	X	X
Provide introductory GIS training for all technical staff	X	X	X	X	X	X	X	X	X	X
and intermediate GIS training for interested staff. Upgrade to ArcGIS if there is staff GIS Analyst.	X	X	X	X	X	X	X	X	X	X
Assess Region 8 needs for GIS development, including identification of priority tasks, data and the capability of specific data manipulation, hardware/ software to accomplish it, GIS database creation, metadata creation, and associated training.	х	X	X	X	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 3

			Wat	ershe	d Mana	ageme	nt Are	a		
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
Create a pilot GIS project (see below) based on the needs assessment in (d).(Ex: watershed analysis indicating spatial and temporal changes in water quality as improved by Regional Board programs. After initial pilot project creation, expand it.	X	х	X	X	X	X	X	X	X	X
Acquire GIS data layers. Obtain appropriate licensed software "off the shelf" or from firms/agencies.	X	X	X	X	X	X	X	X	X	X
Acquire the programs to create GIS data layers and attribute tables, and to populate spatial fields from attribute tables.	X	Х	X	Х	X	X	X	X	X	X
Create scripts to automate GIS functions.	X	X	X	X	X	X	X	X	X	X
Purchase/acquire software for image manipulation (aerial and satellite imagery), 3D representations (i.e., TDS/TIN distribution), etc.	X	X	X	X	X	X	X	X	X	X
Provide a wide range of web-based and compact-disc based watershed education materials.	X	X	X	X	X	X	X	X	X	X
Create a geodatabase from which to make a variety of maps.	X	X	X	X	X	X	X	X	X	X
Provide STORET training for interested staff.	X	X	X	X	X	X	X	X	X	X
STORET setup and input of existing data.	X	X	X	X	X	X	X	X	X	X
Input resource monitoring and compliance monitoring data into STORET.	X	X	X	X	X	X	X	X	X	X
Create format for batch updates.	X	X	X	X	X	X	X	X	X	X
Input all monitoring data from point sources, i.e. hydrocarbon, TDS, perchlorate levels in wells, and non-point sources, i.e., wide-area runoff, to allow study of the spatial and temporal trend of water quality in the entire region. Apply to each WMA.	X	X	X	X	X	X	X	X	X	X
Gather GIS data pertaining to hydrology (storm drains, concrete-lined portions of channels, etc.).	X	X	X	X	X	X	X	X	X	X
Use digitized official Region boundary (CalWaters, DWR) to create maps of Region 8 with detailed boundary lines layered upon topography and streets (political map software). Coordinate this delineation with the other Regions and show some of an adjacent Region's jurisdiction on the maps. Record changes using GPS or other means in the field wherever boundary and man-made "divides" are now more difficult to distinguish i.e. Wildomar/Menifee, Aliso Ck.	x		X		X		X	X	X	X
Identify a priority task for GIS development from the above, or from projects such as the following, as a mapping project (maps can show "snapshots-in-time" and/or changing conditions). Suggested projects: 1) Map hydrocarbon/ perchlorate/ MTBE plume migration; TIN/ TDS concentrations; high selenium areas. 2) Map potential and selected reference sites, i.e., for biocriteria, nutrients.	X	X	X	Х	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 4

	Watershed Management Area									
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
 Map changes in water quality as a result of a Best Management Practice or multiple BMPs used, or a Non-Point Source (NPS) Management Measure (MM). Map changes in water quality as a result of BMP implementation for TMDL compliance. Use monitoring data to assist in evaluating effectiveness of BMPs. Acquire data to assist in TMDL compliance. Map changes in land use patterns linked to changes in water quality. Map habitat types or changes to habitat stand boundaries over time, i.e., change of riparian/CSS/grassland mosaic boundaries; changes to course of a stream, etc. Map Region 8 wetlands/riparian habitat. Indicate existing sites not under protection; reconstructed/created wetlands, restoration efficacy or potential, and impacts over time to wetlands, i.e., size, depth, range, and mitigation sites. Map stream channel erosion areas vs. stabilized areas, and streambank restoration potential. Map channelization; soft-bottomed portions; stretches of "gaining" vs. "losing" streams; non-effluent streams and points of effluent introduction. 	X	X	X	X	X	X	X	x	X	X
3. Reference Sites and Biological Indicies										
Conduct regional surveys to nominate and establish sites that can be referenced for setting/enforcing water quality standards, etc. These "referenced sites" will be stream segments, reaches of lakes or estuaries, ocean water areas, etc., where water quality, beneficial uses, and the prevailing ecosystem have not been severely disturbed by human activities, i.e., El Morro Creek at Crystal Cove State Park.	х	X	Х	Х	Х	X	X	X	X	х
Conduct water quality monitoring and bioassessment of these referenced sites, to establish benchmarks for restoration efforts, setting/enforcing standards, etc.	X	X	X	X	X	X	X	X	X	X
Develop biocriteria for each aquatic life use for each water body class (see Module 11 of USEPA's Water Quality Standards Academy workbook).	X	X	X	X	X	X	X	X	X	X
Establish impacts of pollutants on beneficial uses.	X	X	X	X	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 5

	Watershed Management Area										
Project Type			- x								
and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
4. TMDL Development											
·											
Compile data (GIS, water quality, etc.) and separate by watershed management areas.	X	X	X	X	X	X	X	X	X	X	
Evaluate impacts of 303(d) listed constituents on beneficial uses.	X	X	X	X	X	X	X	X	X	X	
Evaluate data used in placing water body on 303(d) list (what water quality standards were violated?).	X	X	X	X	X	X	X	X	X	X	
Evaluate where (temporally and spatially), in TMDL-candidate water body, beneficial uses are supported or impaired.	X	X	X	X	X	X	X	X	X	X	
Develop and update a dynamic water quality model.	X	X	X	X	X	X	X	X	X	X	
Develop TMDL with defensible calculations and load allocations, consistent with the California Toxics Rule (CCR) and State Implementation Plan (SIP).	X	X	X	X	X	X	X	X	X	Х	
Conduct water quality monitoring in water column and continue monitoring after TMDL adopted: 1) Chemical, biological and geochemical (including sediment and suspended solids).	X	X	X	X	X	X	X	X	X	X	
5. TMDL Implementation											
Set up water quality models and updates for watersheds and receiving waters.	X	X	X	X	X	X	X	X	X	X	
Conduct water quality and watershed model simulations to validate and/or revise load allocations and evaluate compliance with TMDLs.	X	X	X	X	X	X	X	X	X	X	
Create models to simulate groundwater/ surface water interactions that account for contaminant loadings to the watershed, and assess potential remediation strategies.	X	X	X	X	X	X	X	X	X	X	
Identify BMPs to reduce/remove nutrients/sediment.	X	X	X	X	X	X	X	X	X	X	
Review/ revise water quality objectives, including nutrients (Ranked on Basin Plan 2002 Triennial Review priority list).	X	X	X	X	X	X	X	X	X	X	
Evaluate in-lake water quality management strategies and management practices.		X				X	X	X	X	X	
Education/outreach for reducing polluted runoff from urban, agricultural, CAFO, and forested areas.	X	X	X	X	X	X	X	X	X	X	
Perform field surveys to determine the sources of dryweather urban nuisance runoff for all WMAs.	X	X	X	X	X	X	X	X	X	X	
Education/outreach for controlling invasive species.	X	X	X	X	X	X	X	X	X	X	
Classify and assess condition of "unimproved" creeks and streams.	X	X	X	X	X	X	X	X	X	X	

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 6

	Watershed Management Area											
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear		
Monitor water quality, both biological and geochemical. Monitor for nutrient and pathogens.	X	X	X	X	X	X	X	X	X	X		
Evaluate the re-growth potential of bacterial indicators and pathogenic organisms in freshwater habitats, even those immediately adjacent to coast.	X	X	X	X	X	X	X	X	X	X		
Identify and evaluate BMPs for reduction of bacterial indicators/ pathogenic organisms in urban settings.	X	X	X	X	X	X	X	X	X	X		
Identify and evaluate bacterial indicator and pathogen off-site transport mechanisms (and BMPs for their reduction) associated with agricultural operations.				X		X	X	X	X	X		
Implement BMPs and NPS management measures.	X	X	X	X	X	X	X	X	X	X		
Develop a pollutant budget model that can be used to track water quality changes over time.	X	X	X	X	X	X	X	X	X	X		
Conduct REC-1 Beneficial Use assessment (Ranked on Basin Plan 2002 Triennial Review priority list).	X	X	X	X	X	X	X	X	X	X		
Conduct food web and egg studies for detection of bioaccumulative compounds.	X	X	X	X	X	X	X	X	X	X		
Identify sensitive/ indicator species for accumulation of specific contaminants.	X	X	X	X	X	X	X	X	X	X		
6. Stakeholder Meetings and Public Outreach Assemble stakeholder watershed planning groups and development of watershed management plans, including watershed and regional water resources education.	X	X	X	х	X	X	X	Х	X	X		
Promote cooperative relationships and stakeholder partnerships.	X	X	X	X	X	X	X	X	X	X		
Workshops to educate land developers about state- of-the-art water quality mitigation practices, systems, and devices/retrofits.	X	X	X	X	X	X	X	X	X	X		
Conduct public outreach and education on the linkage between surface and ground water quality.	X	X	X	X	X	X	X	X	X	X		
Promote riparian/adjacent open space preservation.	X	X	X	X	X	X	X	X	X	X		
Non-Point Source and TMDL workshops, including urban runoff and stormwater education. Support Adopt-A-Watershed program.	X	X	X	X	X	X	X	X	X	X		
CAFO operator workshop/ biosolids workshop,	A	Λ	Λ	Λ	Λ	А	Λ	Λ	Λ	A		
including waste management practices. Facilitate coordination of local grass-roots watershed		X	X	X		X	X	X	X	X		
management groups and environmental interest groups among themselves and with the Regional Board, as a way of furthering the goals of the Region 8 and State Board watershed management initiative.	X	X	X	X	X	X	X	X	X	X		
Encourage alternatives to concrete, riprap, hardscapes using pervious materials and vegetation.	X	X	X	X	X	X	X	X	X	X		
Discourage development on floodplains.	X	X	X	X	X	X	X	X	X	X		

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 7

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Establish visitor centers that implement watershed education.	X	X	X	X	X	X	X	X	X	X	
Establish a public outreach and education program within a designated Watershed Management Area, focused on all aspects of water resource management (WRM), including but not limited to: water quality, water supply, water conservation, wastewater management, beneficial uses, laws and regulations, etc. In addition to providing funds, WRM agencies within the designated WMA should also contribute to program composition.	x	х	х	х	X	Х	х	х	X	X	
 Citizen monitoring tasks: Collect water quality monitoring samples. Collect observational water quality data, such as beneficial use occurrence and assessment. Conduct stream classification and assessment inventories. Assess effectiveness of BMPs implementing pollution prevention, source control, and source reduction. Monitor/prevent spread of invasive species. 	x	X	x	X	X	X	X	X	X	X	
7. Wetlands/ Riparian/ Stream											
Restoration and Preservation Support acquisition of wetlands and other areas that support WARM, WILD, EST, SPWN, BIOL, COLD and REC1 and/orREC2 beneficial uses.	X	X	X	X	X	X	X	X	X	X	
Implement measures to restore tidal exchange or freshwater influx in fragmented estuaries, coastal lagoons wetlands, or freshwater wetlands.	X	X		X	X						
Provide for identification and delineation of vernal pools and their special protection/ preservation.			X	X	X			X	X	X	
Support creation of riparian buffers.	X	X	X	X	X	X	X	X	X	X	
Support wetlands creation, enhancement, and restoration.	X	X	X	X	X	X	X	X	X	X	
Provide tracking system of wetlands acreages to numerically ensure that there is no net loss of wetland area, including isolated wetlands. Determine area of wetlands with good quality. List loss vs. recovery projects in concert with other Regions, agencies, and NGOs.	х	X	X	X	X	X	X	X	X	X	
Support stream and bank erosion stabilization	X	X	X	X	X	X	X	X	X	X	
projects that use bioengineered solutions. Conduct stream classification/ssessment studies.	X	X	X	X	X	X	X	X	X	X	
Establish/identify reference reaches of surface waters.		X	X	X	X	X	X	X	X	X	
Develop regional hydrologic curves.	X	X	X	X	X	X	X	X	X	X	

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 8

	Watershed Management Area									
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
Collaborate in producing a stream restoration handbook.	X	X	X	X	X	X	X	X	X	X
Assess condition of mitigation banks and classify them.	X	X	X	X	X	X	X	X	X	X
Restore beneficial uses to streams through the application of fluvial geomorphology principles.	X	X	X	X	X	X	X	X	X	X
Preserve and protect remaining unimproved stream segments.	X	X	X	X	X	X	X	X	X	X
Remove concrete channel linings from streams and flood control channels, and restore beneficial uses, such as WILD, WARM, GWR, REC2 and/or REC1, of these channels.	X	X	X	X	X	X	X	X	X	X
"Daylight" fully enclosed drainage channels and similar surface waters and restore the above beneficial uses.	X	X	X	X	X	X	X	X	X	X
Implement program of removal for channel "armor", dams, and weirs with budget and schedule from flood control agencies.	X	X	X	X	X	X	X	X	X	X
Encourage environmental easement acquisitions.	X	X	X	X	X	X	X	X	X	X
Discourage development on flood plains.	X	X	X	X	X	X	X	X	X	X
Where development in a flood plain is already occurring, encourage the use of bioengineering techniques to stabilize and restore water courses to minimize potential destabilization from the loss of the flood plain (i.e. erosion of stream banks, accelerated downcutting, and headward erosion), and to reduce impacts from increased dry weather flows from urban development and flooding.	x	X	X	Х	X	X	X	X	X	X
Wetlands management projects that are consistent with the Southern California Wetlands Recovery Project goals/objectives.	X	X	X	X	X	X	X	X	X	X
8. Habitat Acquisition and Protection										
Preserve and protect endangered and threatened species (plant and animal), their habitat, and movement corridors.	X	X	X	X	X	X	X	X	X	X
Remove barriers to fish spawning (weirs, dams, etc.).	X	X	X	X	X	X	X	X	X	X
Create and improve fish habitat. Preserve and protect designated Critical Coastal Areas (CCA), including State Water Quality Protection Areas (formerly Areas of Special Biological Significance) and certain Marine Managed Areas.	X	X	X	X	X X	X	X	X	X	X
Establish, preserve, and protect wildlife reserves, refuges, and corridor linkages.	X	X	X	X	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 9

			Wat	ershe	d Man	ageme	nt Are	ea		
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
Preserve/protect riparian buffers and "unimproved"	X	X	X	X	X	X	X	X	X	X
streams. Preserve and protect important migratory waterfowl	X	X	X	X	X	X	X	X	X	X
layover sites. Invasive species management, including projects that: 1) Eradicate Eurasian milfoil (Myriophyllum spicatum) in the Big Bear WMA (see below). 2) Eradicate Arundo donax region-wide. 3) Eradicate Caulerpa taxifolia through education, prevention, and removal in coastal lagoons, estuaries, harbors/bays. 4) Eradicate tamarisk (Tamarix reamosissima, T. chinensis, and hybrids) throughout the watershed. 5) Control, if not eradicate, Castor bean (Ricinis communis) throughout the watershed, particularly in riparian areas. 6) Control California (Peruvian) pepper tree (Schinus molle) in areas of flowing or standing water.	X	X	x	X	x	X	X	X	X	X
9. Best Management Practices (BMPs), Non-Point Source (NPS) Management Measures (MMs), and Implementation (Focus on Source Control) Increase emphasis on BMPs and NPS MMs for control of upper watershed sources of NPS						X	X	X	X	
pollutants, including CAFOs and agriculture.	v	X	v	v	v					v
Develop and/or implement BMPs and MMs for nutrient and sediment reduction/removal.	X		X	X	X	X	X	X	X	X
Utilize physical/chemical treatment as BMPs / MMs	X	X	X	X	X	X	X	X	X	X
Support water conservation measures.	X	X	X	X	X	X	X	X	X	X
In marinas and boatyards, recovery of boatwash and hull-jetting wastewater for sewering.	X	X		X	X			X		X
Develop and implement BMPs and MMs for reducing and/or treating recycled water runoff. Develop dry weather flow diversion projects (from	X	X	X	X	X	X	X	X	X	X
channels) to "offline" natural filtering treatment system projects, and sewer.	X	X	X	X	X	X	X	X	X	X
Develop wet weather runoff treatment projects, including diversions to "offline" natural filtering treatment system projects.	X	X	X	X	X	X	X	X	X	X
Support conversions to drip irrigation.	X	X	X	X	X	X	X	X	X	X
Develop and/or implement BMPs to reduce toxicity.	X	X	X	X	X	X	X	X	X	X

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 10

	Watershed Management Area											
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear		
Implement/teach Integrated Pest Management (IPM)	X	X	X	X	X	X	X	X	X	X		
practices. Develop and/or implement pet waste / good housekeeping BMPs.	X	X	X	X	X	X	X	X	X	X		
Develop and/or implement for fertilizer/ manure applications rates to cropland.	X	X	X	X	X	X	X	X	X	X		
Deliver BMP and NPS MM education and outreach, focused on locally important NPS issues, to targeted audiences.	X	X	X	X	X	X	X	X	X	X		
Develop BMPs for constructing and maintaining dirt roads and hiking/equestrian trails.	X	X	X	X	X	X	X	X	X	X		
10.Groundwater Resource Protection Groundwater model for the entire Santa Ana Basin,	X	X	X	X	X	X	X	X	X	X		
as well as for each subbasin/ management zone. Coordinate as many groundwater elevations /water												
quality data into one regional database. Support Department of Water Resources update on	X	X	X	X	X	X	X	X	X	X		
Groundwater Basins of California, providing summary data on subbasins.	X	X	X	X	X	X	X	X	X	X		
Plan effective uses of brownfields that protect groundwater quality.	X	X	X	X		X	X	X				
Solicit groundwater management plans for each subbasin. Canvass water districts, among other agencies. Develop groundwater management plans where none exist.	х	X	X	X	X	X	X	X	X	X		
Develop and implement a regional groundwater monitoring program. Inventory of impacted drinking water supply wells throughout Region, with primary contaminants/ concentrations.	X	X	X	X	X	X	X	X	X	X		
Support protection of groundwater recharge areas.	X	X	X	X		X	X	X	X	X		
Support protection of groundwater sources including ephemeral streams, meadows, and vernal pools.	X	X	X	X	X	X	X	X	X	X		
Plan and construct wellhead treatment facilities for removal of perchlorate from groundwater extracted by municipal supply wells.	X	X	X	X		X	X	X	X	X		
Plan and construct desalters and related peripheral facilities.	X	X	X	X	_	X	X	X	X	X		
Support for seawater intrusion barrier programs.	X	X		X	X							

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 11

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Connect onsite sewage disposal to sewer systems: 1) Facilitate connections to regional sewage collection systems in areas with known or suspected water quality impairment related to use of such systems, particularly in areas close to surface waters or with perched or regionally shallow groundwater.						X	X	X	X	x	
Support efforts to upgrade, expand, and modernize regionwide infrastructure of sewage collection and wastewater treatment systems.	X	X	X	X	X	X	X	X	X	X	
MATERSHED MANAGEMENT AREA A. Anaheim Bay / Huntington Harbour / Bolsa Chica Watershed Management Area Conduct vessel waste studies including sediment and barnacles (continue recent efforts, with the potential to add sites).											
Conduct repair/ upgrade/ installations of pumpout stations in Huntington Harbour. Monitor bay- and inlet-wide water quality, biota (macroinvertebrate), and sediment. Evaluate changes to coastline dynamics posed by a	X X X										
second inlet at Bolsa Chica Ecological Reserve. Focus a projects on comparisons of traditional pathogen indicator assays and human virus/coliphage analyses. Build dry weather flow diversion structures that connect to treatment systems, "offline natural treatment systems," or sewer. Build similar wet	X										
weather flow treatment systems. Remove and relocate sewer line currently located beneath the entrance to the Anaheim Bay National Wildlife Refuge. Support projects of the Huntington Harbour Water Quality Issues Committee and the Bolsa Chica	X										
Technical Advisory Committee. Assess and link water quality values to the different strata of a water body and determine how much of each strata meets water quality standards.	X										

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 12

			Wat	ershe	d Man	ageme	nt Are	a		
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear
Support runoff treatment projects for Bolsa Chica Wetlands and East Garden Grove Wintersburg Channel. Monitor latter outlet to Huntington Harbour for metals, pathogens, toxicity. Provide high quality tidal and intertidal habitat at the	X									
Bolsa Chica wetlands, in coordination with the restoration steering committee.	X									
Increase biomass of pickleweed (Salicornia sp.) and cord grass (Spartina foliosa) in Upper Newport Bay and Anaheim Bay.	X									
Increase biomass of eelgrass (<i>Zostera marina</i>) in Huntington Harbour and other deep channels. Eelgrass shelters the halibut larval stage after pelagic spawning.	X									
B. Lower Santa Ana Watershed Management Area										
Studies of pathogen pathways from urbanization, aiding development of a pathogen TMDL.		X								
Build dry weather flow diversion structures that connect to treatment systems, "offline natural treatment systems," or sewer. Build similar wet weather flow treatment systems.		X								
Evaluate as a reference site the watershed of Fremont Canyon, tributary to Santiago Creek in Orange County's Santa Ana Mountains. It is among the few remaining relatively pristine watersheds in Orange County (<i>Nature Conservancy</i>).		X								
Restore, rehabilitate, preserve and maintain riparian buffers along the Santa Ana River and its tributaries.		X								
Support Santiago Creek habitat protection and enhancement programs.		X								
Efficiently supply surface water to recharge basins. Projects protecting Santa Ana Forebay groundwater recharge basins from nitrogen, TDS, and petroleum/chlorinated hydrocarbons.		X								
Assess integrity of wetlands, estimate acreage, record and map them. Support open-space acquisitions and preservation in the Puente-Chino Hills, Santa Ana Canyon, and Santa Ana Mountains for riparian/watershed restoration and wildlife corridor movement.		X								
Studies of surface water and groundwater interactions between the Santa Ana Forebay and the Santa Ana Pressure Zone.		X								
Conduct outreach to cities to determine interest in developing subwatershed plans based on specific water quality concerns		X								

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 13

	Watershed Management Area											
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear		
C. Coyote Creek/ Carbon Creek Watershed Management Area Support San Gabriel River TMDLs as related to Coyote Creek and Carbon Creek. Given the eventual ocean discharge in Region 4, participate in installation of dry- and wet- weather flow diversion structures, to treatment systems, "offline natural treatment systems," or sewer. Build similar wet			X									
weather flow treatment systems. Monitor, control, and mitigate urban runoff and other impacts from development in the Puente-Chino Hills			X									
and Coyote Hills. Support open-space acquisitions and preservation in the Puente-Chino Hills and Coyote Hills, for riparian/			X									
watershed restoration and wildlife corridor movement. Restore, enhance, and create wetlands/ waterways.			X									
Restore lost and degraded beneficial uses to Coyote and Carbon Creeks, including in-stream habitats, wetlands, native vegetation and bank stabilization, and nitrogen reduction. Support and develop management and restoration plans for the Coyote/Carbon Creeks Watersheds.			X									
D. Newport Bay Watershed												
Management Area												
Perform model simulations for nutrients, algae, and oxygen in upper and lower Newport Bay (NB).				X						1		
Develop dissolved oxygen water quality objectives for NB.				X								
Implement BMPs to remove nitrogen and selenium from groundwater (as well as other sources) in the NB watershed, specifically one project in Peters Canyon Channel, a second in San Diego Creek Reach 2.				X								
Implement BMPs to remove nitrogen from agricultural sources in the NB watershed. Encourage agricultural and urban dischargers to implement control measures to reduce fecal coliform levels and to track the effectiveness of all these measures.				х								
Design and carry out an urban runoff fecal coliform source identification plan for the NB Fecal TMDL.				X								
Design and implement urban runoff fecal coliform source control measures for the NB Fecal TMDL.												
Design and carry out a natural fecal coliform sources identification plan for the NB Fecal TMDL.				X								

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 14

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Design and implement a natural fecal coliform source				X							
control plan for the NB Fecal TMDL. Conduct vessel waste studies (continue recent efforts, with the potential to add sites). Include sediment and barnacles and study ways to avoid jetting hulls while hulls are in the water.				X							
Conduct studies of vessel waste pumpout stations and conduct repair/ upgrade/ installations of stations in Newport Bay.				X							
Anadromous fish restoration (steelhead trout). GIS maps of fish migration blockages and deficiencies.				X							
Monitor Newport Dunes water quality, biota (macroinvertebrates) and sediment as part of Baywide program.				X							
Focus a project on comparisons of traditional pathogen indicator assays and human virus/coliphage analyses.				X							
Install dry weather flow diversion structures and connect to treatment systems, "offline natural treatment systems," or sewer.				X							
Develop and implement management plans that specify practices to reduce sediment and chemical pollutant loadings from row crops, nurseries and/or citrus/avocado orchards.				X							
Design a study to evaluate potential pollutant loadings from agriculture in the Newport Bay watershed. Study would screen surface soils to assess current concentrations of organochlorine compounds, soil texture, and soil TOC as predictors of future pollutant loadings.				X							
Investigate bioaccumulation of organochlorine compounds and selenium in San Diego Creek and Upper/Lower Newport Bay at multiple trophic levels, and develop site-specific biota-sediment accumulation factors, through rigorous studies.				X							
Assess and model long-term impacts of Sediment TMDL, MS4 Permit and BMPs, and USACOE dredging on aggradation/degradation of Newport Bay (are we going from a sediment-heavy system to a sediment-starved system?) and beaches – both upcoast and down-coast as well as intra-bay impacts.				X							
Evaluate biodiversity and compliance with water quality standards in Upper Newport Bay Critical Coastal Area.				X							
Stream restoration projects throughout the watershed that stabilize embankments, or remove "armor" and restore embankments.				X							
Support Serrano Creek preservation, restoration, and revegetation.				X							

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 15

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Support Borrego Creek preservation, restoration, and				X							
revegetation. Use development of The Great Park, El Toro to				*7							
leverage opportunities to "daylight" fully enclosed channels and to initiate restoration efforts on Agua Chinon and Bee Canyon channels.				X							
Create areas that support WILD and WARM beneficial use areas in The Great Park, El Toro.				X							
Implement NPS Management Measures for The				X							
Great Park, El Toro. Determine depth of pollution / contamination in the Rhine Channel. Assess remedial options for cleanup				X							
of the Rhine Channel to meet TMDLs.				A							
Assess ways to increase oxygen and circulation in the Rhine Channel.				X							
Biological and geochemical investigation of the UCI portion of the San Joaquin Marsh for selenium. Egg studies for presence of selenium and other				X							
bioaccumulative compounds in both the San Joaquin Marsh and Newport Bay areas. Target live eggs for non-threatened and endangered species. Target unhatched, nonviable eggs for threatened and endangered species such as the Brown Pelican, Least Tern, and Light-footed Clapper Rail.				X							
Identification and assessment of remedial options for selenium removal from groundwater and surface water in the Peters Canyon Wash area of San Diego				X							
Creek (original Swamp of the Frogs area). Natural Treatment System (NTS) Projects focused on best filtration of urban runoff, legacy contamination,				X							
and groundwater influence from the entire watershed. Increase biomass of pickleweed (Salicornia sp.) and				Λ							
cord grass (<i>Spartina foliosa</i>) in Upper Newport Bay and eelgrass (<i>Zostera marina</i>) in Lower Newport Bay. Eelgrass shelters/feeds the halibut larval stage after pelagic spawning.				X							
				1							
E. Newport Coast Watershed Management Area											
Conduct vessel waste studies (continue recent efforts, with the potential to add additional sites). Include sediment and barnacles and study ways to					X						
avoid jetting hulls while hulls are in the water. Studies determining effects of hydromodification					X						
outfalls to coast. Conduct studies prior to establishing any future vessel waste pumpout stations along the Newport					X						
Coast.					2.						

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 16

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Projects that focus on comparisons of traditional pathogen indicator assays and human virus/					X						
coliphage analyses. Build dry weather flow diversion structures that connect to treatment systems, "offline natural treatment systems," or sewer. Build similar wet weather flow treatment systems.					X						
Help improve Crystal Cove Historic District Preservation and Public Use Plan as led by the California Department of Parks and Recreation.					X						
Coordinate monitoring with Newport Coast Planned Community to prevent wastewater from reaching Critical Coastal Areas (formerly ASBS sites). Ocean monitoring of benthic fauna and pelagic fish offshore of natural-drainage modification projects.					Х						
Restoration program for Little Corona tide pools/biota.					X						
Restoration of drainages tributary to CCAs, to improve attainment of water quality standards.					X						
Assess and link water quality values to the different strata of a water body and determine how much of					X						
each strata meets water quality standards. Monitor toxics offshore in benthic fauna, including fish, and pelagic fish.					X						
Encourage/facilitate Orange County area urban dischargers to develop monitoring programs and evaluate sources of fecal coliform affecting REC1 beneficial use on beaches.					X						
Reduce total/fecal coliform to Buck Gully, Pelican Point Creek, Los Trancos (Crystal Cove Creek), and Muddy Creek (impaired REC1, REC2, and MUN due to urban runoff).					X						
Reduce health risks to marine life and bathers vis-à- vis Little Corona Water Improvement Project BMPs.					X						
Restore anadramous fish (steelhead trout) habitat.					X						
Conduct projects that protect the integrity of San Joaquin Hills natural drainages.					X						
Evaluate biodiversity and compliance with water quality standards in Newport Beach Marine Life Refuge Critical Coastal Area.					X						
Evaluate biodiversity and compliance with water quality standards in Irvine Coast Critical Coastal Area (shared project with Region 9).					X						
F. Middle Santa Ana River Watershed Management Area											
Restore, rehabilitate, preserve and maintain riparian buffers along the Santa Ana River (SAR) and its tributaries.						X					

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 17

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Maximize floodplain/ wildlife corridor swaths on both											
sides of SAR before pending urbanization claims all land, up to the active channel. Support San Timoteo Creek watershed management,						X					
riparian habitat, and channel restoration from Barton Road upstream.											
Remove <i>Arundo donax</i> and tamarisk along the Santa Ana River and its reaches and tributaries. Support and participate in Team Arundo.						X					
Projects to address WQ standards compliance and WQ impacts as a result of the October 2003 and May 2004 fires and subsequent rainy season debris flows.						X					
Connect Reche Canyon Mobile Home Park, Colton, to local sewer system, as well as existing businesses						X					
in Colton/Rialto/Fontana/ Bloomington. Report on current channelization of "Spring Brook", Market Street at Fairmont Park, Riverside. This creek is not concrete-lined where it discharges into Lake Evans, a tributary of the Santa Ana River.						X					
Remove concrete linings from flood control channels, such as sections of Temescal Creek (upstream of Prado wetlands) and San Sevaine Creek (from the foothills of the San Gabriel Mtns downstream). Another lined drain, Sunnyslope Drain (upstream from the Louis Rubidoux nature center) has spawning habitat for the endangered Santa Ana Sucker (Catostomus santaanae).						X					
Programs and coordination meetings focusing on Santa Ana Sucker restoration.						X					
Coordinate with USEPA on site-specific objectives for un-ionized ammonia.						X					
Provide desalters and related peripheral facilities, including pipelines, in groundwater subbasins impacted by excessive TDS concentrations resulting from historic land use practices.						X					
Provide wellhead treatment for removal of perchlorate in water produced by municipal supply wells.						X					
Support projects that protect/restore alluvial fan scrub						X					
Reduce TDS and nitrogen levels, particularly nitrate from agricultural and dairy use. Consolidate monitoring/ ag well data for TDS, nitrates, and pesticides in Riverside area GW subbasins. Coordinate recycled water recharge projects.						X					
Study pathogen pathways from urbanization, aiding development of a pathogen TMDL.						X					
Support efforts to protect habitat and provide open space for endangered and threatened species that have links to water quality standards, consistent with Multiple Species Habitat Conservation Plans.						X					

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 18

	Watershed Management Area										
Project Type						_					
and Description	Bay/ Huntington Bolsa Chica	na	Carbon Creek			Ana River		San Jacinto	na River		
	Anaheim Bay/ Huntin Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
	<u> </u>										
G. Chino Basin Watershed											
Management Area											
Support Basin Studies developing multiple TMDLs for pathogens, nitrogen, etc.							X				
Identify and evaluate bacterial indicator and pathogen off-site transport mechanisms (and BMPs for their reduction) associated with agricultural operations.							X				
Perform field surveys to determine the sources of dry- weather urban nuisance runoff from Chino Basin sites							X				
Projects supporting Chino Basin Dairy Runoff Management Plan Optimum Management Plan and Organics Management Strategy Implementation.							X				
Projects supporting Chino Basin Integrated Ground and Surface Water Model (CIGSM), part of Chino Basin Water Resources Management Study.							X				
Nitrogen removal activities from consolidated basin drainage at Prado Lake Park and wetlands.							X				
Support measures to protect riparian habitats at Prado Wetlands.							X				
H. Lake Elsinore/ San Jacinto											
Watershed Management Area											
Develop nutrient water quality objectives for Lake Elsinore, Canyon Lake, and San Jacinto River (SJR).								X			
Update model simulations for nutrients, sediments, and pathogens in the San Jacinto River Watershed.								X			
Conduct monitoring studies to identify sources of toxicity, sediment, and nutrients entering Lake Elsinore, Canyon Lake, and San Jacinto River, leading to the development of multiple TMDLs.								X			
Monitor and track pesticide/ fertilizer/ manure application to cropland in SJR watershed. Implement BMPs to prevent over-application.								X			
Support efforts of Reclaimed Water Task Force to evaluate use of reclaimed water to stabilize level of Lake Elsinore and reduce impairments of beneficial uses from excessive nutrients.								X			
Restore SJR near Mystic Lake and enhance the riparian habitats on CDFG properties.								X			
Restoration programs for Mystic Lake and vernal pools in this WMA.								X			
Extend regional sewers to Quail Valley and the south shore of Lake Elsinore, and abandon existing septic tank discharges in these areas.								X			
Implement recommended lake management practices.								X			

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 19

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Provide phosphorus removal treatment for all tertiary								X			
effluent proposed to be discharged into L. Elsinore. Conduct a Nutrient Mass Balance Study for Lake								X			
Elsinore/ San Jacinto Watershed. Advance various projects supporting the San Jacinto River Watershed Council, Watershed Management								x			
Plan, and citizen monitoring program. Reduce nutrients in Canyon Lake.								X			
Assist Canyon Lake aeration program.								X			
Conduct inorganic constituent studies for the SJR.								X			
Preserve existing "unimproved" waterways, specifically reaches and tributaries of the San Jacinto River, by protecting the natural condition of these reaches, establishing adequate buffers, and stream restoration.								X			
Plan and construct desalters and related peripheral facilities, including pipelines, in groundwater subbasins impacted by TDS concentrations resulting from historic resource and land use practices.								X			
Conduct dynamic water quality models for Lake Elsinore and Canyon Lake to simulate and predict the impacts of activities in the SJR watershed, and inlake treatment technology on the in-lake water quality, and the beneficial uses.								X			
Assess and link water quality values to the strata of a water body, and determine how much of each strata meets water quality standards.								X			
Assist septic tank removal program by Elsinore Valley Municipal WD.								X			
Support efforts to protect habitat and provide open space for endangered and threatened species closely linked to water quality standards, consistent with Multiple Species Habitat Conservation Plans.								X			
I. Upper Santa Ana River											
Watershed Management Area											
Conduct water quality monitoring to assess effectiveness of the San Bernardino Co. Designated Maintenance Mill Creek Area (DMA).									X		
Support alluvial fan scrub protection, preservation, and restoration projects.									X		
Studies of pathogen pathways from urbanization, aiding development of a pathogen TMDL.									X		
Support efforts to protect habitat and provide open space for endangered and threatened species, consistent with the Multiple Species Habitat									X		
Conservation Plans. Protect and maintain COLD beneficial uses.									X		
Trotoot and maintain GOLD beneficial uses.		ļļ							Λ		

Table 2-1 POTENTIAL STAKEHOLDER PROJECTS FOR THE SANTA ANA REGION (8) 2004 UPDATE – Page 20

	Watershed Management Area										
Project Type and Description	Anaheim Bay/ Huntington Harbour/ Bolsa Chica	Lower Santa Ana	Coyote Creek/Carbon Creek	Newport Bay	Newport Coast	Middle Santa Ana River	Chino Basin	Lake Elsinore/ San Jacinto	Upper Santa Ana River	Big Bear	
Mimimize impacts of bark beetle spraying on water									X		
quality standards. Address water quality standards compliance and WQ impacts as a result of the October 2003 fires and subsequent rainy season debris flows.									X		
J. Big Bear Watershed Management Area											
Revise nutrient water quality objectives for Big Bear Lake (BBL).										X	
Perform model simulations for nutrients, sediment, and macrophytes in BBL and its watershed.										X	
Implement BMPs to reduce sediment and nutrient loading into and within BBL.										X	
Utilize volunteer monitors for stream classification and assessments of creeks.										X	
Identify stream candidates for referenced reach(es).										X	
Restore beneficial species of plants within BBL.										X	
Evaluate in-lake water quality management strategies.										X	
Protect/conserve/ restore Shay Meadows through purchase, restrictive easements, etc.										X	
Programs educating marina operators and boat owners about washing techniques and wastewater recovery.										X	
Address WQ standards compliance and WQ impacts as a result of the October 2003 fires and subsequent rainy season debris flows.										X	
Assess and link water quality values to the different strata of BBL and determine how much of each strata meets water quality standards.										X	
Minimize impacts to surface waters and soil from bark-beetle spraying.										X	
Support expansion of sewer to subbasin communities.										X	